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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,031	05/21/2007	Theodore D. Ciolkosz	W-387-02	9366
43840 7590 09/08/2010 Waters Technologies Corporation 34 MAPLE STREET - LG MILFORD, MA 01757				
EXAMINER				
FREAY, CHARLES GRANT				
ART UNIT		PAPER NUMBER		
3746				
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09/08/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/598,031

**Applicant(s)**

CIOLKOSZ ET AL.

**Examiner**

Charles G. Freay

**Art Unit**

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date 8/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Specification***

The abstract of the disclosure is objected to because the Abstract includes legal phraseology such as "comprises" and "means". Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

Claims 14 and 30 are objected to because of the following informalities: in line 1 of claims 14 and 30 "a" should be "an". Appropriate correction is required.

Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 13 depends upon claim 13. For purposes of examination in this office action it is assumed that claim 13 depends upon claim 12.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In paragraph D of claims 1 and 17 a "fluid path means for receiving and removing fluid from said chamber" is set forth. The "receiving" portion of this claim is unclear, and therefore the structure making up the fluid path is unclear. The claims set forth "...from said chamber" but does not describe fluid going to the chamber. In claims 5 and 21 an end wall is set forth forming part of the fluid path means. This would correspond to fluid flow to the chamber. The examiner would recommend setting forth "...for receiving fluid to and removing fluid from..." in paragraph d of each of the claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10 and 17-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Major (USPN 4,387,736) in view of Dolan (USPAP 2005/0115840).

Major discloses a device for receiving and discharging fluids, and a method for joining fluid conduits. It is noted that in Fig. 3 for claims 1-6 and 17-22 either the top valve arrangement or the bottom valve arrangement can be considered to read on the claimed invention.

With regards to claims 1-10 and 17-26 the lower valve of Fig. 3 discloses the claims as follows. Fig. 3 of major discloses a first housing 12, an end cap 18, a fluid path 20, 14, compression means (the threads on the outer surface of the end cap 18, The first housing having an interior surface 36 defining a chamber that includes a valve 34, the end cap 18 includes a ridge 32 to localize compression force against a plastic seal layer 28 between the end cap and an end cap abutment surface. There is additionally a cylinder 32 having a ball seat and having two rims. In Fig. 3 the portion of

path 14 which opens into the chamber 64, and is surrounded by the wall of 64 is the exterior surface of the end wall in claims 10 and 26. Major does not disclose that the plastic seal is a PTFE, PEEK, PCTFE, PFA or FEP coating. Dolan discloses that PTFE coatings are well known, see the Title and abstract. At the time of the invention it would have been obvious to one of ordinary skill in the art to utilize or substitute a PTFE coating for the "any suitable plastic material" as taught by Dolan since it is a desirable plastic sealing material (Major col. 2 line 55) due to its long life and the coating would result in the elimination of the plastic seal element and the simplification of the assembly process.

Claims 11-16 and 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Major in view of Dolan as applied to claims 1 and 17 above, and further in view of Schmid (USPN 4,945,945).

As set forth above Major in view of Dolan discloses the invention substantially as claimed but does not disclose the exterior surface of the endwall having a plastic coating, there being an adjoining wall for receiving the end wall and compressing the end wall seal coating and there also being a major housing assembly. In Figs. 2 and 3 Schmid discloses a similar sealed ball check valve assembly including (in Fig. 2) a first housing 43, and end cap (the wall forming the lower surface of passage 40) a PTFE seal (rightmost element 56) at the abutment surface between the end cap and the abutment surface, an adjoining wall 38 which forms a compression means along with a major housing portion (such as 77 in Fig. 3. there is also a PTFE seal (leftmost seal 56

in Fig. 2) at the exterior surface of the end wall. At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the valve assembly of Major as taught by the Schmid reference in order to provide a construction which allows for the simple replacement of the ball seal as it wears out.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hunter discloses a valve with a PTFE coating.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles G. Freay whose telephone number is 571-272-4827. The examiner can normally be reached on Monday through Friday 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles G Freay/  
Primary Examiner  
Art Unit 3746

CGF  
August 15, 2010